

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

JUL 27 2010

OFFICE OF AIR, WASTE AND TOXICS

Mr. Eric Durrin Controller Bullseye Glass Company 3722 Southeast 21<sup>st</sup> Avenue Portland, Oregon 97202

Re: Applicability of 40 CFR Part 61 Subpart N to Manufacture of Glass in Periodic Furnaces

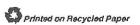
Dear Mr. Durrin:

This letter is in response to a request submitted via e-mail, dated April 6, 2009, for an applicability determination of whether or not 40 CFR §61, National Emission Standards for Inorganic Arsenic Emissions from Glass Manufacturing, (Subpart N) applies to the Bullseye Glass Company's (Bullseye Glass), manufacture of colored art glass. This facility is located in Portland, Oregon. EPA has determined that Subpart N applies to the Bullseye Glass Company's manufacture of colored art glass in pot furnaces as described below.

Bullseye Glass manufactures colored art glass. In your request, you stated that you use a variety of furnaces to melt glass which you refer to as "pot" or "tank" furnaces. You state they are small furnaces that have raw materials charged into them, and after cooking, you ladle glass out of them. Your reported usage of arsenic trioxide is less than 2.5 tons/yr.

Applicability to Subpart N is stated at 40 CFR §61.160(a): "The source, to which this subpart applies too, is each glass melting furnace that uses commercial arsenic as a raw material. This subpart does not apply to pot furnaces." (Emphasis added). Pot furnaces are defined in Subpart N as "a glass melting furnace that contains one or more refractory vessels in which glass is melted by indirect heating. The openings of the vessels are in the outside wall of the furnace and are covered with refractory stoppers during melting." The term "pot furnaces" is further elaborated on in the preamble to the proposed rule in the Federal Register dated July 20, 1983, (48FR33153) "Because the glass is sealed off from the furnace atmosphere, no material from the glass melt can escape from the furnace with the furnace exhaust. Therefore, pot furnaces, as described here, would emit no arsenic emissions."

Bullseye Glass provided further information including photographs and diagrams to EPA by e-mail dated July 8, 2010. It is apparent from the photos, diagrams, and descriptions provided by Bullseye Glass that the vessels used for melting glass are not sealed off from the furnace atmosphere. It is possible for material from the glass melt to escape from the furnace with the furnace exhaust. It is EPA's conclusion that the furnaces used by Bullseye Glass at the Portland facility do not meet the definition of "Pot Furnaces" as that term is defined for the purposes of



40 CFR Part 61 Subpart N. Based on the use of commercial arsenic as a raw material in a glass melting furnace, Bullseye Glass is subject to 40 CFR Part 61 Subpart N.

If you have any further questions or concerns, please contact Heather Valdez of the Region 10 Office of Air, Waste and Toxics at (206) 553-6220.

Sincerely,

Nancy Helm, Manager

Mass Hele

Federal and Delegated Air Programs Unit

cc: Kathy Amidon
Air Permits and Compliance
ODEQ

	А	В	С	D	E	F	G	Н
1	Bullseye G	Iseye Glass Company						
2	Arse							
4			Monthly Usage	Rolling 12- Month Usage	Rolling 12- Month Tonnage	Predicted Future Usage (Tons)		
5		Jan-14	200.0	200.0	0.10	0.10		
6		Feb-14	100.0	300.0	0.15	0.15		
7		Mar-14	200.0	500.0	0.25	0.25		
8		Apr-14	100.0	600.0	0.30	0.30		
9		May-14	200.0	800.0	0.40	0.40		
10		Jun-14	300.0	1100.0	0.55	0.55		
11		Jul-14	100.0	1200.0	0.60	0.60		
12		Aug-14	100.0	1300.0	0.65	0.65		
13		Sep-14	100.0	1400.0	0.70	0.70		
14		Oct-14	100.0	1500.0	0.75	0.75		
15		Nov-14	200.0	1700.0	0.85	0.85		
16		Dec-14	100.0	1800.0	0.90	0.90		
17		Jan-15	100.0	1700.0	0.85	0.85		
18		Feb-15	100.0	1700.0	0.85	0.85		
19		Mar-15	200.0	1700.0	0.85	0.85		
20		Apr-15	100.0	1700.0	0.85	0.85		
21		May-15	100.0	1600.0	0.80	0.80		
22		Jun-15	200.0	1500.0	0.75	0.75		
23		Jul-15	200.0	1600.0	0.80	0.80		
24		Aug-15	200.0	1700.0	0.85	0.85		
25		Sep-15	100.0	1700.0	0.85	0.85		
26		Oct-15	200.0	1800.0	0.90	0.90		
27		Nov-15	100.0	1700.0	0.85	0.85		
28		Dec-15	100.0	1700.0	0.85	0.85		
1 1	I H A	rsenic Triox	ide in Bat	ch Sheet	1/2/			

	C 15		Jx 433.	,									
4	А	В	С	D	E	F	G	Н	1	Ĵ	K	L	M
1 2	Day	Sample Date	Total Chromium	Cobalt	Arsenic	Selenium	Cadmium	Lead	Nickel	Manganese	Beryllium		
2			(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)	(ng/m3)		
3	Tue	10/06/15	406.7	2.3	75.0	9.8	13.0	66.9	17.0	50.5	0.062		
4	Wed	10/07/15	20.2	0.3	3.0	4.1	2.2	5.9	3.4	35.3	0.012		
5	Fri	10/09/15	24.4	0.9	8.8	45.6	13.8	7.6	8.3	13.1	0.018		
6	Sat	10/10/15	24.9	0.3	20.3	3.0	195.4	5.4	2.3	4.0	0.007		
7	Mon	10/12/15	25.5	0.9	20.1	13.2	8.6	32.5	8.0	14.2	0.015		
8	Wed	10/14/15	19.0	0.1	1.1	0.0	1.6	2.2	1.4	18.3	0.008		
9	Thu	10/15/15	17.4	0.4	1.1	0.0	2.7	6.3	3.5	44.2	0.030		
10	Sat	10/17/15	21.0	0.2	7.7	0.8	1.5	10.1	2.9	8.2	0.012		
11	Sun	10/18/15	20.1	0.4	6.7	8.3	4.4	7.6	7.4	8.0	0.008		
12	Tue	10/20/15	21.4	0.3	14.8	12.3	6.5	16.7	2.9	13.1	0.008		
13	Wed	10/21/15	22.8	1.1	101.1	13.0	11.6	60.7	6.8	24.2	0.020		
14	Fri	10/23/15	23.3	0.3	3.0	0.0	0.8	5.2	4.3	27.7	0.013		
15	Sat	10/24/15	439.5	0.8	3.5	2.7	1.1	8.1	7.1	23.5	0.029		
16	Mon	10/26/15	48.0	3.5	60.4	271.1	132.9	67.3	1.9	7.2	0.010		
17	Sun	12/27/15	24.4	0.8	15.9	15.6	10.8	10.2	9.2	21.1	0.019		
18	Thu	10/29/15	37.7	2.8	93.2	220.0	56.9	248.3	4.6	6.0	0.009		
19	Fri	10/30/15	38.5	0.4	97.3	136.5	41.7	124.4	1.4	3.4	0.007		
20	Mon	11/02/15	52.6	0.7	38.3	41.4	24.3	87.6	5.0	13.3	0.007		
21		Average:	71.5	0.9	31.7	44.3	29.4	42.9	5.4	18.6	0.016		
22													
23		Benchmark:	?	100	0.02	?	0.6	150	50	90	0.4		
24													



#### **AMIDON Kathy**

From:

Eric Durrin [ericdurrin@bullseyeglass.com]

Sent: To: Friday, April 03, 2009 2:56 PM 'Valdez.Heather@epamail.epa.gov

Cc:

**AMIDON Kathy** 

Subject:

Bullseye Glass Company -- Applicability of 40 CFR 61, Subpart N

Hello Ms. Valdez,

I have been in contact with Kathy Amidon of the Oregon Department of Environmental Quality. Ms. Amidon is reviewing the permits for our facility. As part of her research, Ms. Amidon investigated regulations regarding arsenic trioxide as it applies to our process and permits.

It seems that 40 CFR 61.160(a) exempts pot furnaces. Further, it appears that the preamble to the original rule making (51 FR 27956, 8/4/1986) and noted in the Response to Comments/Applicability section that the 85% reduction of arsenic emissions applies to existing melting furnaces that emit more than 2.75 tons/yr.

Bullseye Glass manufactures colored art glass. We use a variety of furnaces to melt glass. All of our furnaces are "periodic", as opposed to "continuous". Internally, we refer to these furnaces as "pots" or "tanks". Basically, they are small furnaces that have raw materials charged into them, and after cooking, we ladle glass out of them. Our annual usage of arsenic trioxide is less that 2.5 tons.

In 2008, I worked with Susan Fairchild regarding the NESHAP for Glass Manufacturing Area Sources. At that time, artisan glass manufacturers like Bullseye were exempted from that rule. Our subset of the glass industry was not considered when regulations were drafted. In the same light, it seems to me that Bullseye Glass is operating below the thresholds for these regulations for arsenic trioxide.

I would appreciate your comment on whether these rules are applicable to our facility. I appreciate your efforts related to this matter.

Thank you,

Eric E. Durrin Controller

**Bullseye Glass Company** 

3722 S.E. 21st Avenue | Portland, Oregon 97202 | U.S.A. Phone: 503-232-8887 x103 | Fax: 503-238-9963

#### **AMIDON Kathy**

From: Eric Durrin [ericdurrin@bullseyeglass.com]

Sent: Wednesday, January 02, 2008 12:01 PM

To: AMIDON Kathy

Cc: Dan Schwoerer; Sam Andreakos; Daren Marshall

Subject: RE: Final NESHAP rule published

Hello and Happy New Year,

All of our furnaces are "periodic". We call some furnaces "pots" and others are called "tanks", depending if the molten glass is in a crucible or merely melts within the furnace wall structure. We use a "day melt" cycle where the batch is added to the furnace, melted, and cast. The furnace is then made ready for the next cycle to begin.

A group of colored glass manufacturers worked with Susan Fairchild (the technical contact at the EPA) to submit comments on the new regulations. The authors of the document were not aware of our industry subset when the drafted the proposal — they were very receptive to our input. The final document works for us.

Again, thank you for bringing this matter to my attention -- your were the only person in any agency in the US to notify a manufacturer of a potential impact of the EPA regulation changes. You helped all of the colored glass manufacturers.

Eric E. Durrin - Bullseye Glass Company - 503.232.8887

From: AMIDON Kathy [mailto:AMIDON.Kathy@deq.state.or.us]

Sent: Wednesday, January 02, 2008 11:49 AM

To: Eric Durrin

Subject: Final NESHAP rule published

The final NESHAP for glass manufacturing was published in the Federal Register on 12/26/07.

It exempts pot furnaces and periodic furnaces according to section III, B.1 (Summary of Changes Since Proposal). Do you have any continuous furnaces?

Bullseye not subject to 40 CFR 63.





2/11/16

Uroboros Questions

- Copy to oregon

	Records Request from Bulkeye Glass 2/10/16
Send exam	1. Refactory maderials for tunic of superstructure. Invoices  \$ material information for each furnace in operation. 3/15.  2. Temperature readings for each furnace of the form.  back to 10/1/15. In spreadsheet form.  run wi furnace, product, date 10/1/15 Batch holicis  3. Products of each of MSDS for various product faw materials  4. Batch recipes WI MSDS for various product faw materials  5. Size of each furnace by furnace humble  6. Schematic of the furnace
	> Some info by Friday. Check in Friday
	Copyleftwill  Bullseye 2/10/16

# 2014 Annual Report

## for Air Contaminant Discharge Permit Number 26-3135

Company: Bullseye Glass Company 3722 SE 21<sup>st</sup> Avenue

Portland, Oregon 97202

Report Period: 01/01/2014 - 12/31/2014

### Operating parameters:

- Tons of glass melted = 2,372
- Pounds of arsenic trioxide used = 1,800 (see attachment A)

# Records Request for Spectrum Glass -> Send to Katie McClintock, EDA

Copy Today \*MSDS for refractory for electric # 3 above and below glass line. channel 9,

- charge short w/ times, charge, cook, # idle down x2
- Batch baghouse tests for brassery was te categorization
- -MSDS for metals, arrenis, cadmium, chromium, lead.
- one week of batch tracets.

### Later

- Batch records, recipes and daily recipes for 2 months
- Facance Spessor
- 2010 waste analysis on all baguouse dust baguouse dust
   Schematic for each formation Durner place ment, exhaust. Size.
  - Inventory & usage per month for last 3 years.
- Repacting mutera
- Formulator plan per month. Final 6 send 2 months.
- Baghouse temperature reading locations and readouts

  printing fortest mor of liver soon, 3 mouth death in
- -Baghouse designs and flow rates. > Max temperature of material
- -Which products do you direct bughouse flow.
- MSDSs of all refractory in contact with glass or combushon.